# Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

## **Proposed**

# AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Guardian Automotive Trim, Inc.

Mailing Address: 200 Guardian Avenue,

Morehead, KY 40531-5006

Source Name: Guardian Automotive Trim, Inc.

Mailing Address: same as above

Source Location: 200 Guardian Avenue, Morehead, KY 40531

Permit Number: V-05-019 Source A. I. #: 3866

Activity #: APE20040001 Review Type: Operating Source ID #: 21-205-00042

**Regional Office:** Ashland Regional Office

1550 Wolohan Drive, Suite 1 Ashland, KY 41102-8942

eans

(606) 929-5285

**County:** Rowan

**Application** 

Complete Date: March 9, 2005 Issuance Date: December 29, 2005

**Revision Date:** NA

**Expiration Date:** December 29, 2010

E-Signed by Diana Andrews VERIFY authenticity with ApproveIt

andrews

John S. Lyons, Director Division for Air Quality

Revised 12/09/02

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#### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

**01 (01)** Injection Molding Machines (29) and associated natural gas-fired air

makeup unit (0.5 MMBTU/HR)

Control Equipment: None

Construction Commenced: December, 1996

#### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 67671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

#### 1. Operating Limitations:

Good operating practices to minimize the use of VOC-containing materials as appropriate.

- **Emission Limitations:** Not applicable.
- **Testing Requirements:** Not applicable
- **4. Specific Monitoring Requirements:** Not applicable
- 5. **Specific Record Keeping Requirements:** Not applicable
- **6. Specific Reporting Requirements:** Not applicable
- 7. Specific Control Equipment Operating Conditions: Not applicable

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**O2** (S9A) High Gloss Painting System (High Gloss West) consisting of:

Dry-Off Oven (1.6 MMBTU/HR)

Cooling Exhaust

One (1) Primer Booth -2 robotic applicators with manual touchup

Flash-Off Oven (1.2 MMBTU/HR)

One (1) Basecoat Booth – 4 robotic applicators with manual touchup

One (1) Clearcoat Booth – 4 robotic applicators with manual touchup

Cure Oven (6.0 MMBTU/HR)

Construction Date: November, 1997

Control Equipment: Permanent Total Enclosure (PTE) vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions; Down-draft water wash system for control of particulate matter emissions

#### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 67671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to Section I for Compliance Dates.

#### 1. Operating Limitations:

The usage rate of materials used in all affected facilities shall be limited so as to not exceed the emission limitations in Section B.2.

Good operating practices to minimize the use of VOC-containing materials shall be used as appropriate. Additionally, all purging activities shall be performed into a container so as to optimize work practice standards and minimize VOC emissions.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. Emission Limitations:

**401 KAR 59:010:** §3 The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

### **Compliance Demonstration Method:**

- A) See Monitoring Requirements, B.4
- B) See Periodic Monitoring Requirements table.

**401 KAR 59:010:** §3 Particulate emissions shall not equal or exceed 2.34 lb/hr.

#### **Compliance Demonstration Method:**

Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined in 401 KAR 59:010: § 3, must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. Continuous compliance shall be assured by adhering to the monitoring and record keeping requirements in the periodic monitoring requirements table. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

#### 401 KAR 51:017

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

#### 3. Testing Requirements:

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

#### 4. Specific Monitoring Requirements:

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table. The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 4. **Specific Monitoring Requirements (Continued):**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) when the emission unit is in operation on a weekly basis and maintain a log of the observations. A Method 9 reading by a certified visible emissions observer shall also be performed once a calendar quarter, simultaneous with the qualitative observation, to quantify the visible emissions. If four consecutive quarters indicate opacity emissions less than 20%, subsequent testing shall be conducted on a 12-month basis. In addition, if, during the weekly qualitative observation, visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by a Method 9 reading. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. Subsequently, the requirement to perform quarterly Method 9 readings will be reinstated.

The permittee shall install, calibrate, maintain, and operate monitoring devices, which indicate the operating temperatures of the thermal oxidizers. The monitoring devices shall have an accuracy of the greater of +/- 1.0 percent of the temperature being measured expressed in degrees Fahrenheit or +/- 5.0°F. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media, or other means.

The permittee shall install, calibrate, maintain, and continuously operate devices to monitor velocity within the PTE at locations established during the Method 204 compliance test that demonstrated natural draft opening facial velocities of at least 200 feet per minute and a capture efficiency of 100%. The monitoring devices shall be connected to a device(s) that records the velocity via a strip chart, electronic media, or other means.

### 5. **Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating.
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. **Specific Record Keeping Requirements** (Continued):

- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

#### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compound (VOC) emissions shall be calculated on a twelve-month rolling total and recorded. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall keep records documenting the results of each opacity reading by EPA Reference Method 9.

The permittee shall keep records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and record keeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any "out of standard" conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no "out of standard" conditions occurred, the permittee shall submit a negative report.

### 7. Specific Control Equipment Operating Conditions:

### **Specific Operating Limitations for Thermal Oxidizers:**

A. The average combustion chamber temperature in any 3-hour period shall not fall more than 28°C (50°F) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum set point temperature.

### **Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

#### **Specific Operating Limitations for Permanent Total Enclosures:**

- A. The direction of air flow at all times must be into the enclosure.
- B. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
- C. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

### **Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the supply air ducts entrance and exit velocities and the vestibule exhaust velocity as required by the periodic monitoring requirements table. By fulfilling these requirements it will be ensured that the minimum velocities necessary to maintain the 200 fpm facial velocity for the NDOs and the minimum pressure drop limit of -0.007 inches of water across the enclosure as measured during the most recent Method 204 test are met. Fulfilling these requirements will also ensure that the direction of air flow is into the enclosure.

See Compliance Plan, Section D.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PERIODIC MONITORING REQUIREMENTS

<b>Emission Unit</b>	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
02 (S9A)	High Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.
02 (S9A)	High Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages	Annual	Set Point = Average Temperature established during performance test
02 (S9A)	High Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
02 (S9A)	High Gloss	PTE entrance supply air	Capture Efficiency (%)	Supply Air Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Annual	See Compliance Plan, Section D
02 (S9A)	High Gloss	PTE exit supply air	Capture Efficiency (%)	Supply Air Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Annual	See Compliance Plan, See Section D
02 (S9A)	High Gloss	Vestibule Exhaust duct	Capture Efficiency (%)	Vestibule Exhaust Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Annual	See Compliance Plan, See Section D
02 (S9A)	High Gloss	Vestibule	Capture Efficiency (%)	Vestibule Exhaust Duct Velocity (feet/minute)	Velocity Monitor	Each Occurrence of Set Point Change	Each Occurrence of Set Point Change	Annual	See Compliance Plan, Section D

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PERIODIC MONITORING REQUIREMENTS

<b>Emission Unit</b>	Operation	Equipment	Characteristic	Parameter	Method or	Monitoring	Recording	Calibration	Standard Range
		Monitored	Monitored	Monitored	Device	Frequency	Frequency	Frequency	
02 (S9A)	High Gloss	RTO / PTE	All VOC	Bypass	Alarm	Continuous	Intermittent	Annual	No Faults
			routed to RTO	Damper			(Problem	Confirm	
				position			Log)		
02 (S9A)	High Gloss t	Down-draft	PM Removal	Water Gaps	Visual	Daily	Daily	N/A	No Significant Gaps
		water wash	Efficiency (%)				-		
		system							
02 (S9A)	High Gloss	Primer Booth,	Emission Rate	Particulate	Stack Test	Every 5 years	Every 5 years	Each Test	See Section B.2
		Basecoat Booth		Emission	(EPA Method				
		and Clearcoat			5) or				
		Booth exhaust			Engineering				
					Evaluation				
02 (S9A)	High Gloss	Down-draft	Opacity	Visible	Qualitative	Weekly	Weekly	N/A	See Section B.4
	West	water wash		emissions	visual				
		system			observation or				
					Method 9 Test				

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**03** (**SL3**, **SL4** Low Gloss Painting System consisting of:

SL5, SL6) East Line: one (1) topcoat booth – 6 manual applicators West Line: one (1) topcoat booth – 6 manual applicators

Dual line cure ovens (two ovens rate at 1.2 MMBTU/HR)

Cleanup solvent use

Construction Date: November, 1997

Control Equipment: Permanent Total Enclosure (PTE) vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions; Water wash system for control of particulate

matter emissions

#### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 67671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to Section I for Compliance Dates.

#### 1. **Operating Limitations:**

The usage rate of materials used in all affected facilities shall be limited so as to not exceed the emission limitations in Section B2.

Good operating practices to minimize the use of VOC-containing materials shall be used as appropriate. Additionally, all purging activities shall be performed into a container so as to optimize work practice standards and minimize VOC emissions.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. Emission Limitations:

**401 KAR 59:010:** §3 The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

### **Compliance Demonstration Method:**

- A) See Monitoring Requirements, B.4
- B) See Periodic Monitoring Requirements table.

**401 KAR 59:010:** §3 Particulate emissions shall not equal or exceed 2.34 lb/hr.

#### **Compliance Demonstration Method:**

Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. Continuous compliance shall be assured by adhering to the monitoring and record keeping requirements in the periodic monitoring requirements table. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

#### 401 KAR 51:017

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

#### 3. Testing Requirements:

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

#### 4. Specific Monitoring Requirements:

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table. The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 4. Specific Monitoring Requirements (Continued):

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) when the emission unit is in operation on a weekly basis and maintain a log of the observations. A Method 9 reading by a certified visible emissions observer shall also be performed once a calendar quarter, simultaneous with the qualitative observation, to quantify the visible emissions. If four consecutive quarters indicate opacity emissions less than 20%, subsequent testing shall be conducted on a 12-month basis. In addition, if, during the weekly qualitative observation, visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by a Method 9 reading. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. Subsequently, the requirement to perform quarterly Method 9 readings will be reinstated.

The permittee shall install, calibrate, maintain, and operate monitoring devices, which indicate the operating temperatures of the thermal oxidizers. The monitoring devices shall have an accuracy of the greater of  $\pm$ 1.0 percent of the temperature being measured expressed in degrees Fahrenheit or  $\pm$ 5.0°F. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media, or other means.

The permittee shall install, calibrate, maintain, and continuously operate a device to monitor pressure drop within the PTE at the location established during the Method 204 compliance test that demonstrated a pressure drop across the enclosure of at least 0.007 inches  $H_2O$  and a capture efficiency of 100%. The monitoring device shall be connected to a device(s) that records the pressure drop via a strip chart, electronic media, or other means.

#### 5. Specific Record Keeping Requirements:

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating.
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. Specific Record Keeping Requirements (Continued):

- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

#### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compound (VOC) emissions shall be calculated on a twelve month rolling total and recorded. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall keep records documenting the results of each opacity reading by EPA Reference Method 9.

The permittee shall keep records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any "out of standard" conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no "out of standard" conditions occurred, the permittee shall submit a negative report.

### 7. Specific Control Equipment Operating Conditions:

### **Specific Operating Limitations for Thermal Oxidizers:**

A. The average combustion chamber temperature in any 3-hour period shall not fall more than  $28^{\circ}\text{C}$  ( $50^{\circ}\text{F}$ ) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum setpoint temperature.

### **Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

#### **Specific Operating Limitations for Permanent Total Enclosures:**

- A. The direction of air flow at all times must be into the enclosure.
- B. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
- C. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

### **Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the pressure drop as required by the periodic monitoring requirements table to ensure that it meets the minimum pressure differential requirement across the enclosure of -0.007 inches of water and the direction of air flow is into the enclosure.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PERIODIC MONITORING REQUIREMENTS

<b>Emission Unit</b>	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
03 (SL3, SL4, SL5, SL6)	Low Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.
03 (SL3, SL4, SL5, SL6)	Low Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages	Annual	Setpoint = Average Temperature established during performance test
03 (SL3, SL4, SL5, SL6)	Low Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
03 (SL3, SL4, SL5, SL6)	Low Gloss	Low Gloss PTE near Resist Paint Booth	Capture Efficiency (%)	Pressure Differential across enclosure (in. H <sub>2</sub> O)	Pressure Differential Monitor (in. H <sub>2</sub> O)	Continuous	15-Minute Averages	Annual	Minimum pressure differential of –0.007 inches of H <sub>2</sub> O
03 (SL3, SL4, SL5, SL6)	Low Gloss	RTO / PTE	All VOC routed to RTO	By-Pass Damper Position	Alarm	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults
03 (SL3, SL4, SL5, SL6)	Low Gloss	Water wash system	PM Removal Efficiency (%)	Water Gaps	Visual	Daily	Daily	N/A	No Significant Gaps
03 (SL3, SL4, SL5, SL6)	Low Gloss	Spray Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 5) or Engineering Evaluation	Every 5 years	Every 5 years	Each Test	See Section B.2
03 (SL3, SL4, SL5, SL6)	Low Gloss	Water wash system	Opacity	Visible emissions	Qualitative visual observation or Method 9 Test	Weekly	Weekly	N/A	See Section B.4

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**04 (SE1)** Chrome Pre-Plating Line consisting of:

Tank 319 – Neutralizer, Tank 324 – Pre-Dip, Tank 325 – Activator, Tank 329 – Accelerator, Tanks 333, 334 & 335 – Electroless Nickel,

Tank 27 – Acid Dip, Tanks 342 & 343 – Acid Strike,

Tank 345 – Acid Dip

Construction Date: December, 1996

Control Equipment: Pre-Plate Wet Scrubber #1 for control of particulate

matter, Cu, HCl, NaCl and H<sub>2</sub>SO<sub>4</sub>

#### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

401 KAR 63:021, Existing sources emitting toxic air pollutants.

#### 1. **Operating Limitations:** N/A

#### 2. Emission Limitations:

401 KAR 59:010 §3,

- 1. Particulate emissions from tanks 325, 329, 342 and 343 shall not exceed 2.34 pounds/hour each.
- 2. Visible emissions from tanks 325, 329, 342 and 343 shall not exceed 20% opacity each.

#### 401 KAR 63:020 §3,

No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health or welfare of humans, animals and plants.

#### **Compliance Demonstration Method:**

See Testing Requirements and Monitoring Requirements

401 KAR 63:021 §1,

The hourly emissions of copper and sulfuric acid shall not equal or exceed 7.5 pounds/hour and 8.7 pounds/hour, respectively. These are plantwide hourly emission limits.

#### **Compliance Demonstration Method:**

Demonstrate compliance with 401 KAR 59:010 by testing for particulate matter emissions prior to control equipment (see <u>3. Testing Requirement (B)</u>) or operate according to <u>8. Alternate Operating Scenarios.</u>

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. Testing Requirements:

- A. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.
- B. EPA Test Method 5 or an alternative test method approved by the Division shall be used to determine the emissions of particulate matter. Pending Division approval, the results of the performance test shall be used for the purpose of demonstrating compliance with 59:010 § 3(2).
- C. EPA Test Methods 29 and 8 or alternative test method(s) approved by the Division shall be used to determine the emissions of copper and sulfuric acid. Pending approval of the test(s), the permittee shall use the results from the performance test in conjunction with the ISCST3 air dispersion model (or a comparable model) for the purpose of demonstrating compliance with 63:020.
- D. In lieu of conducting the performance test specified in 3.B above, the permittee may submit an engineering evaluation for the purpose of quantifying particulate matter emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of engineering evaluation for the purpose of demonstrating compliance with 59:010 § 3(2). If the Division finds the engineering evaluation to be deficient, the permittee shall be required to fulfill the testing requirements of 3.B above with a revised schedule for completion of the testing to be established by the Division.
- E. In lieu of conducting the performance tests specified in 3.C above, the permittee may submit an engineering evaluation for the purpose of quantifying copper and/or sulfuric acid emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of the engineering evaluation in conjunction with the ISCST3 air dispersion model (or a comparable model) to show compliance with 63:020. If the Division finds the engineering evaluation to be deficient or if the air dispersion modeling results relying on data from the engineering evaluation show that the source is not in compliance with 63:020, the permittee shall be required to fulfill the testing requirements of 3.C above with a revised schedule for completion of the testing to be established by the Division.
- F. Performance tests shall be conducted within 180 days of the issuance of this permit. Engineering evaluations shall be submitted within 180 days of the issuance of this permit.
- G. Should the performance test show that the source is not in compliance with 59:010 or, 63:020, the permittee will operate according to **8.** Alternate Operating Scenarios. Results of the performance test will then be used to establish the differential pressure for the scrubber as a site specific operating parameter.
- H. See Section D and G(a)17

#### 4. Specific Monitoring Requirements:

A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. Specific Record Keeping Requirements:

A weekly log of qualitative visual observations of opacity shall be maintained.

#### **6.** Specific Reporting Requirements:

See Section F.5 and F.6.

### 7. Specific Control Equipment Operating Conditions:

None

#### **8.** Alternate Operating Scenarios:

401 KAR 63:020 and 63:021 - The scrubber shall be in place and functional at all times of operation.

#### **Operating Limitations:**

- A. Pressure taps shall be installed at any of the following locations:
  - 1. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
  - 2. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
  - 3. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
- B. Pressure taps shall be sited at locations that are:
  - 1. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
  - 2. Situated such that no air filtration at measurement site will occur that could bias the measurement.
- C. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
- D. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
- E. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.
- F. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **8.** Alternate Operating Scenarios (Continued):

### **Specific Monitoring Requirements:**

**Monitoring, Scrubber:** 401 KAR 63:020 and 401 KAR 63:021

- A. Weekly, record the pressure drop across the unit.
- B. Once per quarter, visually inspect device to ensure there is proper drainage and no evidence of chemical attack on the structural integrity of the device.
- C. If applicable once per quarter, visually inspect the back portion of chevron blade mist eliminator to ensure that it is dry.
- D. Once per quarter, visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks.
- E. Add fresh makeup water to the top of the packed bed whenever makeup is added.
- F. Adhere to manufacturer's recommended monitoring procedures where more stringent than those specified above.

#### **Specific Record Keeping Requirements:**

**Record Keeping, Scrubber:** 401 KAR 63:020 and 401 KAR 63:021

- A. Maintain weekly records of the pressure drop(s) across the unit.
- B. Maintain quarterly records of visual inspections.
- C. Maintain records of manufacturer's recommended operating and monitoring procedures and any monitoring done according to those procedures.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**5(SE2)** Chrome Plating Line consisting of:

Tanks 309, 310, 311 – ABS etch, Tank 434 – Pre-dip, Tank 435 – Chrome Plate, Tank 300 – Chrome Strip

Control Equipment: Etch Strip Scrubber #7 and Chrome Scrubber #2 for

control of particulate matter Cr, H<sub>2</sub>SO<sub>4</sub> and NaHSO<sub>4</sub>

Construction Date: November, 1997

#### **APPLICABLE REGULATIONS:**

40 CFR 63, Subpart N – National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

401 KAR 63:021, Existing sources emitting toxic air pollutants.

#### 1. **Operating Limitations:**

(Tank #435 only) § 63.342(d)(2)

A. If a chemical fume suppressant containing a wetting agent is used, the surface tension of the electroplating or anodizing bath contained within the affected source shall not exceed 45 dynes per centimeter (dynes/cm) as measured with a stalagmometer, or 35 dynes/cm as measured with a tensiometer, at any time during operation of the tank.

#### (**Tank #435 only**) § 63.342(f)

- B. Work practice standards:
  - 1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan described in 5(C) of this section.
  - 2. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by paragraph 3 of §63.342(f).

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. <u>Emission Limitations</u>:

(Tank #435 only) § 63.342(d)(1)

A. The concentration of total chromium in the exhaust gas stream discharged to the atmosphere shall not exceed 0.01 mg/dscm (4.4x10<sup>-6</sup> gr/dscf).

### **Compliance Demonstration Method:**

The affected source shall be considered to meet this limit if operated according to the conditions set forth in 1. **Operating Limitations** (A) & (B), above.

#### (Tanks #309, 310, 311, Tank #434, Tank #435 & Tank #300)

- B. 401 KAR 59:010 §3,
  - 1. Particulate emissions from each tank shall not exceed 2.34 pounds/hour.
  - 2. Visible emissions from the tank's stack release points shall not exceed 20% opacity each.

### **Compliance Demonstration Method:**

See Testing Requirements and Monitoring Requirements.

### (Tanks #309, 310, 311, Tank #434, Tank #435 & Tank #300)

C. 401 KAR 63:020 §3,

No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health or welfare of humans, animals and plants.

### **Compliance Demonstration Method:**

See Testing Requirements.

D. 401 KAR 63:021 §1,

The hourly emission rate of sulfuric acid shall not exceed 8.7 pounds/hour. This is the plantwide hourly emission limit.

#### **Compliance Demonstration Method:**

Demonstrate compliance with 401 KAR 59:010 by testing for particulate matter emissions prior to control equipment (see <u>3. Testing Requirement (B)</u>) or operate according to **8.** Alternate Operating Scenarios.

#### 3. Testing Requirements:

- A. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.
- B. EPA Test Method 5 or an alternative test method approved by the Division shall be used to determine the emissions of particulate matter. The test shall be performed within 180 days of the issuance of this permit. The results of the performance test shall be used for the purpose of demonstrating compliance with 59:010 § 3(2).
- C. EPA Test Methods 306 or 306A and 8 or alternative test method(s) approved by the Division shall be used to determine the emissions of chromium VI and sulfuric acid. The permittee shall use the results from the performance test in conjunction with ISCST3 air dispersion model (or a comparable model) to show compliance with 63:020.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. <u>Testing Requirements (Continued)</u>:

- D. In lieu of conducting the performance test specified in 3.B above, the permittee may submit an engineering evaluation for the purpose of quantifying particulate matter emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of engineering evaluation for the purpose of demonstrating compliance with 59:010 § 3(2). If the Division finds the engineering evaluation to be deficient, the permittee shall be required to fulfill the testing requirements of 3.B above with a revised schedule for completion of the testing to be established by the Division.
- E. In lieu of conducting the performance tests specified in 3.C above, the permittee may submit an engineering evaluation for the purpose of quantifying chromium VI and/or sulfuric acid emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of the engineering evaluation in conjunction with the ISCST3 air dispersion model (or a comparable model) to show compliance with 63:020. If the Division finds the engineering evaluation to be deficient or if the air dispersion modeling results relying on data from the engineering evaluation show that the source is not in compliance with 63:020, the permittee shall be required to fulfill the testing requirements of 3.C above with a revised schedule for completion of the testing to be established by the Division.
- F. Performance tests shall be conducted within 180 days of the issuance of this permit. Engineering evaluations shall be submitted within 180 days of the issuance of this permit.
- G. Should the performance test show that the source is not in compliance with 59:010 or 63:020, the permittee will operate according to 8. Alternate Operating Scenarios. Results of the performance test will then be used to establish the differential pressure for the scrubber as a site specific operating parameter per §63.344(d).
- H. See Section D and G(a)17.

#### 4. **Specific Monitoring Requirements:**

### Monitoring Schedule, Tank #435, Plating Bath: §63.343(c)(5)(ii)

- A. The surface tension shall be measured once every 40 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, Appendix A of 40 CFR 63, Subpart N.
- B. The time between monitoring must be adjusted if an exceedance occurs. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the exceedance occurred. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during another 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed is once every 40 hours of tank operation.
- C. Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures of paragraph (B) above.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 4. **Specific Monitoring Requirements (Continued):**

(Tanks #309, 310, 311, Tank #434, Tank #435 & Tank #300)

D. A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

#### 5. **Specific Record Keeping Requirements:**

### (Tank #435 only) Operation and maintenance plan:

- A. The operation and maintenance plan on file at the facility shall include the following elements:
  - 1. The plan shall specify the operation and maintenance criteria for the affected source and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
  - 2. The plan shall incorporate the work practice standards for that device or monitoring equipment, as identified in Table 1 of §63.342;
  - 3. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and,
  - 4. The plan shall include a systematic procedure for identifying malfunctions of process equipment and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
- B. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the operation and maintenance plan **within 45 days** after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, or monitoring equipment during similar malfunction events, and a program for corrective action of such events.
- C. If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter **within 7 working days** after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the Division.
- D. The permittee may utilize applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OHSA) plans, or other existing plans, in the operation and maintenance plan, provided the alternative plans meet the requirements of this section.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. **Specific Record Keeping Requirements (Continued):**

E. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.

### (Tank #435 only) Operation and maintenance plan:

- F. Based on the results of a determination made under paragraph 2(i) of §63.342(f), the Division may require that the permittee make changes to the operation and maintenance plan. Revisions may be required if the Division finds that the plan:
  - 1. Does not address a malfunction that has occurred;
  - 2. Fails to provide for the operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
  - 3. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
- G. The permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Division for the life of the affected source or until the source is no longer subject to the provisions of Chapter 63, Subpart N. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e. superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Division for a period of 5 years after each revision to the plan.
- H. Additional Records: §63.346(b)
  - 1. Maintenance performed on the affected source, or on monitoring equipment;
  - 2. Records of the occurrence, duration, and cause (if known) of each malfunction of process, and monitoring equipment;
  - 3. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;
  - 4. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan;
  - 5. Test reports documenting results of all performance tests;
  - 6. All measurements as may be necessary to determine the conditions of performance tests;
  - 7. Records of monitoring data required by **4. Specific Monitoring Requirements** that are used to demonstrate compliance with 40 CFR 63 Subpart N, including the date and time the data are collected;
  - 8. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, or monitoring equipment;
  - 9. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, or monitoring equipment;
  - 10. The total process operating time of the affected source during the reporting period;

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. **Specific Record Keeping Requirements** (Continued):

### (Tank #435 only) Operation and maintenance plan:

- 11. Records of the date and time that fume suppressants are added to the electroplating or anodizing bath;
- 12. Documentation supporting the notifications and reports required by **6. Specific Reporting Requirements.**
- I. A weekly log of qualitative visual observations of opacity shall be maintained.

### **Specific Reporting Requirements:**

### A. Methods of Reporting:

Reports may be sent by U.S. mail, fax, another courier, or if acceptable to both the permittee and the Division, by electonic media.

- 1. Submittals sent by U.S. mail shall be postmarked on or before the specified date.
- 2. Submittals sent by other methods shall be received by the Division on or before the specified date.

### B. (Tank #435 only) Ongoing Compliance Status Reports:

The permittee shall prepare a summary report to document the ongoing compliance status of the affected source.

- 1. If there are no exceedances, the report shall be completed **annually** and retained on site, and made available to the Division upon request.
- 2. If the following two conditions are met, **semiannual** reports shall be completed and submitted to the Division's Frankfort Regional Office:
  - a) The total duration of excess emissions (as indicated by the monitoring data collected by the permittee in accordance with 4. Specific Monitoring Requirements, is 1 percent or greater of the total operating time for the reporting period; and
  - b) The total duration of malfunctions of the air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.
- 3. The Division may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.
- 4. A permittee currently required to submit ongoing compliance status reports on a semiannual or more frequent basis, or that is required to submit the annual report instead of retaining it at the site, may change to the requirements in B.1 above if all of the following conditions are met:
  - a) For 1 full year, the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;
  - b) The permittee continues to comply with all applicable record keeping and monitoring requirements;
  - c) The Division does not object to a reduced reporting frequency for the affected source.
  - d) Procedures for reducing frequency and submittals of reports can be found in paragraphs §63.347 (h)(3)(ii) and (iii).

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **6. Specific Reporting Requirements** (Continued):

- B. (Tank #435 only) Ongoing Compliance Status Reports:
  - 5. Contents of Ongoing Compliance Status Reports:
    - a) The company name and address of the affected source;
    - b) An identification of the operating parameter that is monitored for compliance determination;
    - c) The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation;
    - d) The beginning and ending dates of the reporting period;
    - e) A description of the type of process performed in the affected source;
    - f) The total operating time of the affected source during the reporting period;
    - g) A summary of operating parameter values, including the total duration of excess emissions during the reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;
    - h) A certification by a responsible official, as defined in §63.2, that the work practice standards in §63.342(f) were followed in accordance with the operation and maintenance plan for the source;
    - i) If the operation and maintenance plan required by §63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report required by §63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed;
    - j) A description of any changes in monitoring, processes, or controls since the last reporting period;
    - k) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
    - 1) The date of the report.

#### 7. Specific Control Equipment Operating Conditions:

The fume scrubber shall be maintained as recommended by the manufacturer. See Section E.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **8.** Alternate Operating Scenarios:

401 KAR 63:020 and 63:021

The scrubbers shall be in place and functional at all times of operation.

#### **Operating Limitations:**

- A. Pressure taps shall be installed at any of the following locations:
  - 1. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
  - 2. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
  - 3. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
- B. Pressure taps shall be sited at locations that are:
  - 1. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
  - 2. Situated such that no air filtration at measurement site will occur that could bias the measurement.
- C. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
- D. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
- E. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.
- F. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

#### **Specific Monitoring Requirements:**

Monitoring, Scrubber: 401 KAR 63:020 and 63:021

- A. Weekly, record the pressure drop across the unit.
- B. Once per quarter, visually inspect device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
- C. Once per quarter, visually inspect back portion of the chevron blade mist eliminator (if applicable) to ensure that it is dry and there is no breakthrough of chromic acid mist.
- D. Once per quarter, visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks.
- E. Add fresh makeup water to the top of the packed bed whenever makeup is added.
- F. Adhere to manufacturer's recommended monitoring procedures where more stringent than those specified above.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **8.** Alternate Operating Scenarios (Continued):

**Specific Record Keeping Requirements:** 

**Record Keeping, Scrubber:** 401 KAR 63:020 and 63:021

- A. Maintain weekly records of the pressure drop(s) across the unit.
- B. Maintain quarterly records of visual inspections.
- C. Maintain records of manufacturer's recommended operating and monitoring procedures and any monitoring done according to those procedures.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6 (SE3) Acid copper tanks (402 – 410) and Acid activator tank 414

Treatment and storage tank 34

Control equipment: Copper Wet Scrubber #3 for control of particulate matter, Cu and

 $H_2SO_4$ 

Construction commenced: December 1996

#### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

401 KAR 63:021, Existing source emitting toxic air pollutants.

#### 1. **Operating Limitations:** N/A

#### 2. Emission Limitations:

401 KAR 59:010: §3,

- 1. Particulate emissions from tanks 402 410 and 414 shall not exceed 2.34 pounds/hour each
- 2. Visible emissions from tanks 402 410 and 414 shall not exceed 20% opacity each.

401 KAR 63:020 §3,

No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health or welfare of humans, animals and plants.

#### **Compliance Demonstration Method:**

See Testing Requirements and Monitoring Requirements.

401 KAR 63:021 §1,

The hourly emission rates of copper and sulfuric acid shall not exceed 7.5 pounds/hour and 8.7 pounds/hour, respectively. These are plantwide emission limits.

### **Compliance Demonstration Method:**

Demonstrate compliance with 401 KAR 59:010 by testing for particulate matter emissions prior to control equipment (see <u>3. Testing Requirement (B)</u>) or operate according to **8.** Alternate Operating Scenarios.

#### **3.** Testing Requirements:

A. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 3. <u>Testing Requirements (Continued)</u>:

- B. EPA Test Method 5 or an alternative test method approved by the Division shall be used to determine the emissions of particulate matter. The results of the performance test shall be used for the purpose of demonstrating compliance with 59:010 § 3(2).
- C. EPA Test Method 8 or an alternative test method approved by the Division shall be used to determine the emissions of sulfuric acid. The permittee shall use the results from the performance test in conjunction with the ISCST3 air dispersion model (or a comparable model) to show compliance with 63:020.
- D. In lieu of conducting the performance test specified in 3.B above, the permittee may submit an engineering evaluation for the purpose of quantifying particulate matter emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of engineering evaluation for the purpose of demonstrating compliance with 59:010 § 3(2). If the Division finds the engineering evaluation to be deficient, the permittee shall be required to fulfill the testing requirements of 3.B above with a revised schedule for completion of the testing to be established by the Division.
- E. In lieu of conducting the performance tests specified in 3.C above, the permittee may submit an engineering evaluation for the purpose of quantifying sulfuric acid emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of the engineering evaluation in conjunction with the ISCST3 air dispersion model (or a comparable model) to show compliance with 63:020. If the Division finds the engineering evaluation to be deficient or if the air dispersion modeling results relying on data from the engineering evaluation show that the source is not in compliance with 63:020, the permittee shall be required to fulfill the testing requirements of 3.C above with a revised schedule for completion of the testing to be established by the Division.
- F. Performance tests shall be conducted within 180 days of the issuance of this permit. Engineering evaluations shall be submitted within 180 days of the issuance of this permit.
- G. Should the performance test show that the source is not in compliance with 59:010 or 63:020, the permittee will operate according to **8. Alternate Operating Scenarios**. Results of the performance test will then be used to establish the differential pressure for the scrubber as a site specific operating parameter.
- H. See Section D and G(a)17.

#### 4. Specific Monitoring Requirements:

A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

#### 5. Specific Record Keeping Requirements:

A weekly log of qualitative visual observations shall be maintained.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Reporting Requirements:**

See Section F.5 & F.6.

#### 7. Specific Control Equipment Operating Conditions:

N/A

### **8.** <u>Alternate Operating Scenarios</u>:

401 KAR 63:020 and 63:021

The scrubber shall be in place and functional at all times of operation.

#### **Operating Limitations:**

- A. Pressure taps shall be installed at any of the following locations:
  - 1. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
  - 2. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
  - 3. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
- B. Pressure taps shall be sited at locations that are:
  - 1. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
  - 2. Situated such that no air filtration at measurement site will occur that could bias the measurement.
- C. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
- D. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
- E. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.
- F. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 8. Alternate Operating Scenarios:

### **Specific Monitoring Requirements:**

**Monitoring, Scrubber:** 401 KAR 63:020 and 63:021

- A. Weekly, record the pressure drop across the unit.
- B. Once per quarter, visually inspect device to ensure there is proper drainage and no evidence of chemical attack on the structural integrity of the device.
- C. If applicable once per quarter, visually inspect the back portion of chevron blade mist eliminator to ensure that it is dry.
- D. Once per quarter, visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks.
- E. Add fresh makeup water to the top of the packed bed whenever makeup is added.
- F. Adhere to manufacturer's recommended monitoring procedures where more stringent than those specified above.

#### **Specific Record Keeping Requirements:**

Record Keeping, Scrubber: 401 KAR 63:020 and 63:021

- A. Maintain weekly records of the pressure drop(s) across the unit.
- B. Maintain quarterly records of visual inspections.
- C. Maintain records of manufacturer's recommended operating and monitoring procedures and any monitoring done according to those procedures.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**7 (SE4)** Nickel Plating process consisting of:

Semi-bright tanks (417 – 428), Bright nickel tanks (426 – 428), and Dur-nickel tanks (429 & 430)

Control equipment: Nickel Wet Scrubber #4 for control of particulate matter, Cu, and H<sub>2</sub>SO<sub>4</sub>

Treatment and storage tanks 41, 42 and 43 Construction commenced: December 1996

#### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

#### 1. **Operating Limitations:** N/A

#### 2. Emission Limitations:

401 KAR 59:010: §3,

- 1. Particulate emissions from tanks 417 428, 426 428, and 429 430 shall not exceed 2.34 pounds/hour each.
- 2. Visible emissions from tanks 417 428, 426 428, and 429 430 shall not exceed 20% opacity each.

#### 401 KAR 63:020 §3,

No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health or welfare of humans, animals and plants.

#### **Compliance Demonstration Method:**

See Testing Requirements.

#### 3. Testing Requirements:

- A. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.
- B. EPA Test Method 5 shall be used to determine the emissions of particulate matter. The results of the performance test shall be used for the purpose of demonstrating compliance with 59:010 § 3(2).
- C. EPA Test Methods 29 and 8 or alternative test method(s) approved by the Division shall be used to determine the emissions of copper and sulfuric acid. Pending approval of the test(s), the permittee shall use the results from the performance test in conjunction with the ISCST3 air dispersion model (or a comparable model) for the purpose of demonstrating compliance with 63:020.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Testing Requirements** (Continued):

- D. In lieu of conducting the performance test specified in 3.B above, the permittee may submit an engineering evaluation for the purpose of quantifying particulate matter emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of engineering evaluation for the purpose of demonstrating compliance with 59:010 § 3(2). If the Division finds the engineering evaluation to be deficient, the permittee shall be required to fulfill the testing requirements of 3.B above with a revised schedule for completion of the testing to be established by the Division.
- E. In lieu of conducting the performance tests specified in 3.C above, the permittee may submit an engineering evaluation for the purpose of quantifying copper and/or sulfuric acid emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of the engineering evaluation in conjunction with the ISCST3 air dispersion model (or a comparable model) to show compliance with 63:020. If the Division finds the engineering evaluation to be deficient or if the air dispersion modeling results relying on data from the engineering evaluation show that the source is not in compliance with 63:020, the permittee shall be required to fulfill the testing requirements of 3.C above with a revised schedule for completion of the testing to be established by the Division.
- F. Performance tests shall be conducted within 180 days of the issuance of this permit. Engineering evaluations shall be submitted within 180 days of the issuance of this permit.
- G. Should the performance test show that the source is not in compliance with 59:010 or 63:020, the permittee will operate according to 8. <u>Alternate Operating Scenarios</u>. Results of the performance test will then be used to establish the differential pressure for the scrubber as a site specific operating parameter.
- H. See Section D and G(a)17.

#### 4. **Specific Monitoring Requirements:**

A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

#### 5. Specific Record Keeping Requirements:

A weekly log of qualitative visual observations of opacity shall be maintained.

### **Specific Reporting Requirements:**

See Section F.5 & F.6.

#### 7. Specific Control Equipment Operating Conditions:

N/A

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **8.** Alternate Operating Scenarios:

401 KAR 63:020

The scrubber shall be in place and functional at all times of operation.

#### **Operating Limitations:**

- A. Pressure taps shall be installed at any of the following locations:
  - 1. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
  - 2. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
  - 3. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
- B. Pressure taps shall be sited at locations that are:
  - 1. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
  - 2. Situated such that no air filtration at measurement site will occur that could bias the measurement.
- C. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
- D. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
- E. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.
- F. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

#### **Specific Monitoring Requirements:**

Monitoring, Scrubber: 401 KAR 63:020

- A. Weekly, record the pressure drop across the unit.
- B. Once per quarter, visually inspect device to ensure there is proper drainage and no evidence of chemical attack on the structural integrity of the device.
- C. If applicable once per quarter, visually inspect the back portion of chevron blade mist eliminator to ensure that it is dry.
- D. Once per quarter, visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks.
- E. Add fresh makeup water to the top of the packed bed whenever makeup is added.
- F. Adhere to manufacturer's recommended monitoring procedures where more stringent than those specified above.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **8.** Alternate Operating Scenarios (Continued):

**Specific Record Keeping Requirements:** 

**Record Keeping Requirements, Scrubber:** 401 KAR 63:020

- A. Maintain weekly records of the pressure drop(s) across the unit.
- B. Maintain quarterly records of visual inspections.
- C. Maintain records of manufacturer's recommended operating and monitoring procedures and any monitoring done according to those procedures.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

8 (SE5) Nitric Strip Tanks 302 and 303

Control equipment: Nitric Wet Scrubber #5 for control of HNO<sub>3</sub>

Construction commenced: December 1996

#### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

401 KAR 63:021, Existing source emitting toxic air pollutants.

#### 1. Operating Limitations: N/A

#### 2. Emission Limitations:

401 KAR 59:010: §3,

- 1. Particulate emissions from tanks 302 and 303 shall not exceed 2.34 pounds/hour each.
- 2. Visible emissions from tanks 302 and 303 shall not exceed 20% opacity each.

401 KAR 63:020: §3,

No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health or welfare of humans, animals and plants.

#### **Compliance Demonstration Method:**

See Testing Requirements.

401 KAR 63:021: §1,

The hourly emission rate of nitric acid shall not exceed 25.4 pounds/hour. This is the plantwide emission limit.

#### **Compliance Demonstration Method:**

Demonstrate compliance with 401 KAR 59:010 by testing for particulate matter emissions prior to control equipment (see <u>3. Testing Requirement (B)</u>) or operate according to **8.** Alternate Operating Scenarios.

#### 3. Testing Requirements:

- A. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.
- B. EPA Test Method 5 shall be used to determine the emissions of particulate matter. The results of the performance test shall be used for the purpose of demonstrating compliance with 59:010 § 3(2).

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## 3. <u>Testing Requirements (Continued)</u>:

- C. A Division approved test method shall be used to determine the emissions of nitric acid. Pending approval of the test(s), the permittee shall use the results from the performance test in conjunction with the ISCST3 air dispersion model (or a comparable model) to show compliance with 63:020.
- D. In lieu of conducting the performance test specified in 3.B above, the permittee may submit an engineering evaluation for the purpose of quantifying particulate matter emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of engineering evaluation for the purpose of demonstrating compliance with 59:010 § 3(2). If the Division finds the engineering evaluation to be deficient, the permittee shall be required to fulfill the testing requirements of 3.B above with a revised schedule for completion of the testing to be established by the Division.
- E. In lieu of conducting the performance tests specified in 3.C above, the permittee may submit an engineering evaluation for the purpose of quantifying nitric acid emissions. Pending Division approval of the engineering evaluation, the permittee shall use the results of the engineering evaluation in conjunction with the ISCST3 air dispersion model (or a comparable model) to show compliance with 63:020. If the Division finds the engineering evaluation to be deficient or if the air dispersion modeling results relying on data from the engineering evaluation show that the source is not in compliance with 63:020, the permittee shall be required to fulfill the testing requirements of 3.C above with a revised schedule for completion of the testing to be established by the Division.
- F. Performance tests shall be conducted within 180 days of the issuance of this permit. Engineering evaluations shall be submitted within 180 days of the issuance of this permit.
- G. Should the performance test show that the source is not in compliance with 59:010 or 63:020, the permittee will operate according to **8. Alternate Operating Scenarios**. Results of the performance test will then be used to establish the differential pressure for the scrubber as a site specific operating parameter.
- H. See Section D and G(a)17.

#### 4. Specific Monitoring Requirements:

A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

### 5. **Specific Record Keeping Requirements:**

A weekly log of qualitative visual observations of opacity shall be maintained.

#### **6.** Specific Reporting Requirements:

See Section F.5 & F.6.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 7. Specific Control Equipment Operating Conditions:

N/A

#### **8.** Alternate Operating Scenarios:

401 KAR 63:020 and 63:021

The scrubber shall be in place and functional at all times of operation.

### **Operating Limitations:**

- A. Pressure taps shall be installed at any of the following locations:
  - 1. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
  - 2. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
  - 3. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
- B. Pressure taps shall be sited at locations that are:
  - 1. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
  - 2. Situated such that no air filtration at measurement site will occur that could bias the measurement.
- C. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
- D. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
- E. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.
- F. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

#### **Specific Monitoring Requirements:**

Monitoring, Scrubber: 401 KAR 63:020 and 63:021

- G. Weekly, record the pressure drop across the unit.
- H. Once per quarter, visually inspect device to ensure there is proper drainage and no evidence of chemical attack on the structural integrity of the device.
- I. If applicable once per quarter, visually inspect the back portion of chevron blade mist eliminator to ensure that it is dry.
- J. Once per quarter, visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks.
- K. Add fresh makeup water to the top of the packed bed whenever makeup is added.
- L. Adhere to manufacturer's recommended monitoring procedures where more stringent than those specified above.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **8.** Alternate Operating Scenarios (Continued):

**Specific Record Keeping Requirements:** 

**Record Keeping, Scrubber:** 401 KAR 63:020 and 63:021

- A. Maintain records of the pressure drop(s) across the unit.
- B. Maintain quarterly records of visual inspections.
- C. Maintain records of manufacturer's recommended operating and monitoring procedures and any monitoring done according to those procedures.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

10(B1) Cleaver Brooks FLX 700-800-160-HW
natural gas-fired steam boiler #1
8 mmBTU/hr maximum heat input
Indirect heat exchanger
Construction commenced December 1996

11 (B2) Cleaver Brooks FLX 700-800-160-HW natural gas-fired steam boiler #2 8 mmBTU/hr maximum heat input Indirect heat exchanger

Construction commenced December 1996

13 (B3) Cleaver Brooks FLX 700-800-160-HW natural gas-fired steam boiler #3 8 mmBTU/hr maximum heat input Indirect heat exchanger Construction commenced December 1996

17 (B6) Kewaunee natural gas-fired steam boiler #6
Indirect Heat Exchanger
1.7 mmBTU/hr maximum heat input
Construction commenced June 1996

#### **APPLICABLE REGULATIONS:**

401 KAR 59:015, New Indirect Heat Exchangers. The provisions of this regulation apply to each affected facility commenced on or after April 9, 1972 (affected facilities with a heat input capacity of 250 MM Btu/hr or less, with respect to particulate and sulfur dioxide emissions).

#### 1. Operating Limitations:

The affected facilities shall be operated so as not to exceed the emission limitations in Section B.2.

#### 2. <u>Emission Limitations</u>:

- 1) Pursuant to 401 KAR 59:015 § 4(2), emissions from each unit shall not exceed 20 % opacity.
- 2) Particulate emissions shall not exceed 0.448 lb/mmBTU for each boiler in accordance with 401 KAR 59:015 § 4(1)(c).
- 3) Sulfur dioxide emissions shall not exceed 2.04 lb/mmBTU for each boiler in accordance with 401 KAR 59:015 § 5(1)(c).

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. <u>Emission Limitations (Continued)</u>:

## **Compliance Demonstration Method:**

The unit is considered to be in compliance with the particulate, sulfur dioxide and opacity standards when burning pipeline quality natural gas.

## 3. <u>Testing Requirements</u>:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

## 4. **Specific Monitoring Requirements:**

The permittee shall monitor the volume of natural gas burned.

### 5. **Specific Record Keeping Requirements:**

See Section D.4.

- **6. Specific Reporting Requirements:** None
- 7. **Specific Control Equipment Operating Conditions:** None

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**12 (SR1A)** Resist Line, consisting of:

- (1) resist spray booth 1 robotic applicator with manual touchup
- (1) resist topcoat spray booth 1 robotic applicator with manual touchup
- (2) 1.2 MMBTU/HR natural gas-fired curing ovens

Clean-up solution

Construction Date: June, 1999

Control Equipment: Permanent Total Enclosure (PTE) vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions; Water wash system for control of particulate matter emissions

#### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 67671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.
- 401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.
- 401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.
- 40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to Section I for Compliance Dates.

40 CFR 64, Compliance Assurance Monitoring, applicable to a pollutant-specific emissions unit at a major source that is subject to an emission limitation for the regulated air pollutant. The unit uses a control device to achieve compliance with the emission limitation and the unit has potential precontrol emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

#### 1. Operating Limitations:

The usage rate of materials used in all affected facilities shall be limited so as to not exceed the emission limitations in Section B2.

Good operating practices to minimize the use of VOC-containing materials shall be used as appropriate. Additionally, all purging activities shall be performed into a container so as to optimize work practice standards and minimize VOC emissions.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. Emission Limitations:

**401 KAR 59:010:** §3 The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

## **Compliance Demonstration Method:**

- A) See Monitoring Requirements, B.4
- B) See Periodic Monitoring Requirements table.

**401 KAR 59:010:** §3 Particulate emissions shall not equal or exceed 2.34 lb/hr.

### **Compliance Demonstration Method:**

Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. Continuous compliance shall be assured by adhering to the monitoring and record keeping requirements in the periodic monitoring requirements table. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

#### 401 KAR 51:017

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

### **Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

#### 3. Testing Requirements:

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

#### 4. **Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table. The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## 4. **Specific Monitoring Requirements (Continued):**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) when the emission unit is in operation on a weekly basis and maintain a log of the observations. A Method 9 reading by a certified visible emissions observer shall also be performed once a calendar quarter, simultaneous with the qualitative observation, to quantify the visible emissions. If four consecutive quarters indicate opacity emissions less than 20%, subsequent testing shall be conducted on a 12-month basis. In addition, if, during the daily qualitative observation, visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by a Method 9 reading. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. Subsequently, the requirement to perform quarterly Method 9 readings will be reinstated.

The permittee shall install, calibrate, maintain, and operate monitoring devices which indicate the operating temperatures of the thermal oxidizers. The monitoring devices shall have an accuracy of the greater of +/- 1.0 percent of the temperature being measured expressed in degrees Fahrenheit or +/- 5.0°F. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media, or other means.

The permittee shall install, calibrate, maintain, and continuously operate a device to monitor pressure drop within the PTE at the location established during the Method 204 compliance test that demonstrated a pressure drop across the enclosure of at least 0.007 inches  $H_2O$  and a capture efficiency of 100%. The monitoring device shall be connected to a device(s) that records the pressure drop via a strip chart, electronic media, or other means.

## 5. **Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. Specific Record Keeping Requirements (Continued):

- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

#### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compound (VOC) emissions shall be calculated on a twelve month rolling total and recorded. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall keep records documenting the results of each opacity reading by EPA Reference Method 9.

The permittee shall keep records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any "out of standard" conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no "out of standard" conditions occurred, the permittee shall submit a negative report.

## 7. Specific Control Equipment Operating Conditions:

## **Specific Operating Limitations for Thermal Oxidizers:**

A. The average combustion chamber temperature in any 3-hour period shall not fall more than 28°C (50°F) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum setpoint temperature.

## **Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

#### **Specific Operating Limitations for Permanent Total Enclosures:**

- A. The direction of air flow at all times must be into the enclosure.
- B. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
- C. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the pressure drop as required by the periodic monitoring requirements table to ensure that it meets the minimum pressure differential requirement across the enclosure of –0.007 inches of water and the direction of air flow is into the enclosure.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PERIODIC MONITORING REQUIREMENTS

<b>Emission Unit</b>	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
12 (SR1A)	Resist Line	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.
12 (SR1A)	Resist Line	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages	Annual	Setpoint = Average Temperature established during performance test
12 (SR1A)	Resist Line	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
12 (SR1A)	Resist Line	Low Gloss PTE near Resist Paint Booth	Capture Efficiency (%)	Pressure Differential (in. H <sub>2</sub> O) across enclosure	Pressure Differential Monitor (in. H <sub>2</sub> O)	Continuous	15-Minute Averages	Annual	Minimum pressure differential of –0.007 inches of H <sub>2</sub> O
12 (SR1A)	Resist Line	RTO / PTE	All VOC routed to RTO	By-Pass Damper Position	Alarm	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults
12 (SR1A)	Resist Line	Water wash system	PM Removal Efficiency (%)	Water Gaps	Visual	Daily	Daily	N/A	No Significant Gaps
12 (SR1A)	Resist Line	Spray Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 5) or Engineering Evaluation	Every 5 years	Every 5 years	Each Test	See Section B.2
12 (SR1A)	Resist Line	Water wash system	Opacity	Visible emissions	Qualitative visual observation or Method 9 Test	Weekly	Weekly	N/A	See Section B.4

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

14 (SK5A) High Gloss East (High Bake) consisting of:

Dry-Off Oven (1.6 MMBTU/HR)

Cooling Exhaust

One (1) Primer Booth -2 robotic applicators with manual touchup

One (1) Basecoat Booth – 4 robotic applicators with manual touchup

One (1) Clearcoat Booth – 4 robotic applicators with manual touchup

Cure Oven (4.8 MMBTU/HR)

Construction Date: June, 1999

Control Equipment: Permanent Total Enclosure (PTE) vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions; Down-draft water wash system for control of particulate matter emissions

#### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 67671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.
- 401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.
- 401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.
- 40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to Section I for Compliance Dates.
- 40 CFR 64, Compliance Assurance Monitoring, applicable to a pollutant-specific emissions unit at a major source that is subject to an emission limitation for the regulated air pollutant. The unit uses a control device to achieve compliance with the emission limitation and the unit has potential precontrol emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 1. Operating Limitations:

The usage rate of materials used in all affected facilities shall be limited so as to not exceed the emission limitations in Section B2.

Good operating practices to minimize the use of VOC-containing materials shall be used as appropriate. Additionally, all purging activities shall be performed into a container so as to optimize work practice standards and minimize VOC emissions.

## 2. <u>Emission Limitations</u>:

**401 KAR 59:010:** §3 The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

# **Compliance Demonstration Method:**

- A) See Monitoring Requirements, B.4
- B) See Periodic Monitoring Requirements table.

**401 KAR 59:010:** §3 Particulate emissions shall not equal or exceed 2.34 lb/hr.

#### **Compliance Demonstration Method:**

Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. Continuous compliance shall be assured by adhering to the monitoring and record keeping requirements in the periodic monitoring requirements table. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

#### 401 KAR 51:017

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

### **Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

### 3. <u>Testing Requirements:</u>

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

#### 4. Specific Monitoring Requirements:

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table. The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## 4. **Specific Monitoring Requirements (Continued):**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) when the emission unit is in operation on a weekly basis and maintain a log of the observations. A Method 9 reading by a certified visible emissions observer shall also be performed once a calendar quarter, simultaneous with the qualitative observation, to quantify the visible emissions. If four consecutive quarters indicate opacity emissions less than 20%, subsequent testing shall be conducted on a 12-month basis. In addition, if, during the daily qualitative observation, visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by a Method 9 reading. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. Subsequently, the requirement to perform quarterly Method 9 readings will be reinstated.

The permittee shall install, calibrate, maintain, and operate monitoring devices which indicate the operating temperatures of the thermal oxidizers. The monitoring devices shall have an accuracy of the greater of +/- 1.0 percent of the temperature being measured expressed in degrees Fahrenheit or +/- 5.0°F. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media, or other means.

The permittee shall install, calibrate, maintain, and continuously operate devices to monitor velocity within the PTE at locations established during the Method 204 compliance test that demonstrated natural draft opening facial velocities of at least 200 feet per minute and a capture efficiency of 100%. The monitoring devices shall be connected to a device(s) that records the velocity via a strip chart, electronic media, or other means.

## 5. **Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements, when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. Specific Record Keeping Requirements (Continued):

- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

## **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compound (VOC) emissions shall be calculated on a twelve month rolling total and recorded. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

## **Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any "out of standard" conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no "out of standard" conditions occurred, the permittee shall submit a negative report.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 7. Specific Control Equipment Operating Conditions:

### **Specific Operating Limitations for Thermal Oxidizers:**

A. The average combustion chamber temperature in any 3-hour period shall not fall more than 28°C (50°F) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum setpoint temperature.

## **Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

## **Specific Operating Limitations for Permanent Total Enclosures:**

- A. The direction of air flow at all times must be into the enclosure.
- B. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
- C. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the supply air ducts entrance and exit velocities and the vestibule exhaust velocity as required by the periodic monitoring requirements table. By fulfilling these requirements it will be ensured that the minimum velocities necessary to maintain the 200 fpm facial velocity for the NDOs and the minimum pressure drop limit of -0.007 inches of water across the enclosure as measured during the most recent Method 204 test are met. Fulfilling these requirements will also ensure that the direction of air flow is into the enclosure.

See Compliance Plan, Section D.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PERIODIC MONITORING REQUIREMENTS

<b>Emission Unit</b>	Operation	Equipment Monitored	Characteristic	Parameter Monitored	Method or	Monitoring	Recording	Calibration	Standard Range
14 (SK5A)	High Bake	Four RTOs (SK5A, S9A, SL11A, SR1A)	Monitored  Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Frequency Continuous	15-Minute Averages & Intermittent Problem Log	Frequency Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.
14 (SK5A)	High Bake	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages	Annual	Setpoint = Average Temperature established during performance test
14 (SK5A)	High Bake	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
14 (SK5A)	High Bake	PTE entrance supply air	Capture Efficiency (%)	Supply Air Duct Velocity (feet/minute	Velocity Monitor	Continuous	15-Minute Averages	Annual	See Compliance Plan, Section D.
14 (SK5A)	High Bake	PTE exit supply air	Capture Efficiency (%)	Supply Air Duct Velocity (feet/minute	Velocity Monitor	Continuous	15-Minute Averages	Annual	See Compliance Plan, Section D.
14 (SK5A)	High Bake	Vestibule exhaust duct	Capture Efficiency (%)	Vestibule Exhaust Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Annual	See Compliance Plan, Section D.
14 (SK5A)	High Bake	RTO / PTE	All VOC routed to RTO	Bypass Damper position	Alarm	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## PERIODIC MONITORING REQUIREMENTS

<b>Emission Unit</b>	Operation	Equipment	Characteristic	Parameter	Method or	Monitoring	Recording	Calibration	Standard Range
		Monitored	Monitored	Monitored	Device	Frequency	Frequency	Frequency	
14 (SK5A)	High Bake	Down-draft	PM Removal	Water Gaps	Visual	Daily	Daily	N/A	No Significant Gaps
		water wash	Efficiency (%)						
		system							
14 (SK5A)	High Bake	Primer Booth,	Emission Rate	Particulate	Stack Test	Every 5 years	Every 5 years	Each Test	See Section B.2
		Basecoat Booth		Emission	(EPA Method				
		and Clearcoat			5 or				
		Booth exhaust			Engineering				
					Evaluation)				
14 (SK5A)	High Bake	Down-draft	Opacity	Visible	Qualitative	Weekly	Weekly	N/A	See Section B.4
		water wash		emissions	visual				
		system			observation or				
					Method 9 Test				

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**15(B4)** Cleaver Brooks FLX 700-800-160-HW

natural gas-fired steam boiler #4 8 mmBTU/hr maximum heat input

Indirect heat exchanger

Construction commenced June 1999

**16 (B5)** Cleaver Brooks FLX 700-800-160-HW

natural gas-fired steam boiler #5 8 mmBTU/hr maximum heat input

Indirect heat exchanger

Construction commenced June 1999

#### **APPLICABLE REGULATIONS:**

401 KAR 59:015, New Indirect Heat Exchangers. The provisions of this regulation apply to each affected facility commenced on or after April 9, 1972 (affected facilities with a heat input capacity of 250 MM Btu/hr or less, with respect to particulate and sulfur dioxide emissions).

### 1. **Operating Limitations:**

The affected facilities shall be operated so as not to exceed the emission limitations in Section B.2.

#### 2. Emission Limitations:

- A) Pursuant to 401 KAR 59:015 § 4(2), emissions from each unit shall not exceed 20 % opacity.
- B) Particulate emissions shall not exceed 0.400 lb/mmBTU for each boiler in accordance with 401 KAR 59:015 § 4(1)(c).
- C) Sulfur dioxide emissions shall not exceed 1.67 lb/mmBTU for each boiler in accordance with 401 KAR 59:015 § 5(1)(c).

#### **Compliance Demonstration Method:**

The unit is considered to be in compliance with the particulate, sulfur dioxide and opacity standards while burning pipeline quality natural gas.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## 3. <u>Testing Requirements:</u>

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

### 4. Specific Monitoring Requirements:

The permittee shall monitor the volume of natural gas burned.

# 5. **Specific Record Keeping Requirements:**

See Section D.4.

- **6. Specific Reporting Requirements:** None
- 7. Specific Control Equipment Operating Conditions: None

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Paint Mix Room East servicing High Gloss East (High Bake) including cleanup activities

Construction Date: June, 1999

Control Equipment: Exhaust vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions

#### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 67671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to Section I for Compliance Dates.

#### 1. Operating Limitations:

N/A

#### 2. Emission Limitations:

#### 401 KAR 51:017

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Section D.

#### 3. Testing Requirements:

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

#### 4. Specific Monitoring Requirements:

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. **Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements, when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. **Specific Record Keeping Requirements** (Continued):

## Thermal Oxidizer Specific Record Keeping Requirements:

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

## **Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any "out of standard" conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no "out of standard" conditions occurred, the permittee shall submit a negative report.

# 7. Specific Control Equipment Operating Conditions:

## **Specific Operating Limitations for Thermal Oxidizers:**

A. The average combustion chamber temperature in any 3-hour period shall not fall more than 28°C (50°F) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum setpoint temperature.

## **Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PERIODIC MONITORING REQUIREMENTS

<b>Emission Unit</b>	Operation	Equipment	Characteristic	Parameter	Method or	Monitoring	Recording	Calibration	Standard Range
		Monitored	Monitored	Monitored	Device	Frequency	Frequency	Frequency	
18	Paint Mix	Four RTOs	Destruction	Oxidizer	Thermocouple	Continuous	15 Minute	Annual	Not More Than 28°C
	Room East	(SK5A, S9A,	Efficiency (%)	Combustion			Averages &		Below Last
		SL11A, SR1A)		Chamber			Intermittent		Compliance Test, 3
				Temperature			Problem Log		Hour Avg.
18	Paint Mix	Four RTOs	Destruction	Oxidizer	Thermocouple	Continuous	15 Minute	Annual	Setpoint = Average
	Room East	(SK5A, S9A,	Efficiency (%)	Combustion			Averages		Temperature
		SL11A, SR1A)		Chamber					established during
				Temperature					performance test
18	Paint Mix	Four RTOs	Destruction	VOC In /	Stack Test	Every 5	Every 5	Each Test	See Section B.2,
	Room East	(SK5A, S9A,	Efficiency (%)	Out	(EPA Method	Years	Years		Compliance
		SL11A, SR1A)			25A)				Demonstration
									Method
18	Paint Mix	Paint Mix Room	PTE	Bypass	Alarm	Continuous	Intermittent	Annual	See Compliance Plan,
	Room East	Exhausts	Collection	Damper			(Problem	Confirm	Section D.
				position			Log)		
18	Paint Mix	Paint Mix Room	Emission Rate	VOC	EPA Method	Every 5	Every 5	Each Test	See Section B.2,
	Room East	Exhausts		emitted	25 test	Years	Years		Compliance
									Demonstration
									Method

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Paint Mix Room West servicing High Gloss West including cleanup activities

Construction Date: June, 1999

Control Equipment: Exhaust vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions

#### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 67671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to Section I for Compliance Dates.

### 1. **Operating Limitations:**

N/A

#### 2. Emission Limitations:

#### 401 KAR 51:017

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

## 3. <u>Testing Requirements:</u>

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

### 4. Specific Monitoring Requirements:

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. **Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements, when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

## Thermal Oxidizer Specific Record Keeping Requirements:

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and record keeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any "out of standard" conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no "out of standard" conditions occurred, the permittee shall submit a negative report.

# 7. Specific Control Equipment Operating Conditions:

## **Specific Operating Limitations for Thermal Oxidizers:**

A. The average combustion chamber temperature in any 3-hour period shall not fall more than 28°C (50°F) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum setpoint temperature.

## **Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PERIODIC MONITORING REQUIREMENTS

<b>Emission Unit</b>	Operation	Equipment	Characteristic	Parameter	Method or	Monitoring	Recording	Calibration	Standard Range
		Monitored	Monitored	Monitored	Device	Frequency	Frequency	Frequency	
19	Paint Mix	Four RTOs	Destruction	Oxidizer	Thermocouple	Continuous	15 Minute	Annual	Not More Than 28°C
	Room West	(SK5A, S9A,	Efficiency (%)	Combustion			Averages &		Below Last
		SL11A, SR1A)		Chamber			Intermittent		Compliance Test, 3
				Temperature			Problem Log		Hour Avg.
19	Paint Mix	Four RTOs	Destruction	Oxidizer	Thermocouple	Continuous	15 Minute	Annual	Setpoint = Average
	Room West	(SK5A, S9A,	Efficiency (%)	Combustion			Averages		Temperature
		SL11A, SR1A)		Chamber					established during
				Temperature					performance test
19	Paint Mix	Four RTOs	Destruction	VOC In /	Stack Test	Every 5	Every 5	Each Test	See Section B.2,
	Room West	(SK5A, S9A,	Efficiency (%)	Out	(EPA Method	Years	Years		Compliance
		SL11A, SR1A)			25A)				Demonstration
									Method
19	Paint Mix	Paint Mix Room	PTE	Bypass	Alarm	Continuous	Intermittent	Annual	No Faults
	Room West	Exhausts	Collection	Damper			(Problem	Confirm	
				position			Log)		
19	Paint Mix	Paint Mix Room	Emission Rate	VOC	EPA Method	Every 5	Every 5	Each Test	See Section B.2,
	Room West	Exhausts		emitted	25 test	Years	Years		Compliance
									Demonstration
									Method

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

20 High Bake Palin Unit and Wastewater Treatment Pit – 41,000 gallons High Bake, three (3) 330 gallon Stainless Steel Totes – Spent Solvent Storage High Gloss Palin Unit and Wastewater Treatment Pit – 41,000 gallons High Gloss, three (3) 330 gallon Stainless Steel Totes – Spent Solvent Storage

#### **APPLICABLE REGULATIONS:**

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to Section I for Compliance Dates.

### 1. **Operating Limitations:**

See Section I.

- **2. Emission Limitations:** See Section I.
- **3. Testing Requirements:** See Section I.
- **4. Specific Monitoring Requirements:** See Section I.
- **Specific Record Keeping Requirements:** See Section I.
- **6. Specific Reporting Requirements:** See Section I.
- 7. Specific Control Equipment Operating Conditions: See Section I.

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# **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	Generally Applicable Regulation
1.	Low Gloss Mask Washer 12-15 ppm Challenge 4855	401 KAR 63:020
2.	Graco Gun Washer	401 KAR 63:020
3.	Spraymation Booth – Test Paint	401 KAR 63:020
4.	Plating Lab – Two (2) Hamilton Laboratory Hoods	401 KAR 63:020
5.	Plating 330-gallon Aqua Ammonia Tank and Vent Hood	401 KAR 63:020
6.	Plating – Corning Chrome Distillation Column	401 KAR 63:020
7.	Plating – Two (2) Chrome Atmospheric Evaporators	401 KAR 63:020
8.	Molding – Safety Kleen Parts Washer	401 KAR 63:020
9.	Plating – Wastewater Treatment	401 KAR 63:020

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. Volatile Organic Compound (VOC) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
- 2. PM<sub>10</sub> emissions, defined as PM totals, shall not exceed 15 tons per year significant net emission rate for each of the following two groups as listed in state regulation 401 KAR 51:001, Section 221.

#### **EMISSION GROUP A:**

Emission Group 2 (S9A), High Gloss Paint System (High Gloss West)

Emission Group 3 (SL3, SL4, SL5, SL6, SL1, SL2) Low Gloss East and West Lines Emission Group 4 (SE1), 5 (SE2), 6 (SE3), 7 (SE4), 8 (SE5), All electroplating process tanks and equipment

Emission Groups 10 (B1), 11 (B2), 13 (B3), Cleaver Brooks Boilers 1-3 (8 mmBTU/hr heat input each)

Emission Group 17 (B6), Kewaunee Boiler 6 (1.7 mmBTU/hr heat input)

#### **EMISSION GROUP B:**

Emission Group 12 (SR1A), Resist line #1

Emission Group 14 (SK5A), High Gloss Painting System (High Bake)

Emission Group 15 (B4), 16 (B5), Cleaver Brooks Boilers 4-5 (8 mmBTU/hr heat input each)

- 4. All records of fuel type and monthly usage amounts shall be kept on a facility wide basis and not required to be kept on a process by process basis.
- 5. All engineering evaluations shall be submitted to the Permit Review Branch of the Division for Air Quality.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

6. An air dispersion model protocol for potentially hazardous matter and toxic substance emissions (air toxics) for sources listed in Section B and Section C of this permit shall be submitted within 60 days of the issuance of the proposed permit. Emission points in Section B and Section C of the permit that need not be included in the air dispersion model may be identified in the air dispersion model protocol. Justification must be provided for exclusion of these emission points from the modeling by either providing emission calculations which demonstrate that the activity does not emit air toxics and/or using a screening model such as SCREEN3 using worst-case release characteristics to determine the concentration of toxics emitted from the emission point(s). Upon approval of the protocol, the source shall model the air toxics emissions as indicated in the protocol. The source shall submit the results of the air modeling to the Division, whereupon the emissions of toxics shall be evaluated to determine the compliance status with 401 KAR 63:020.

# **Continuous Compliance Plan**

# Emission Units 02 (High Gloss), 03 (Low Gloss), 12 (Resist), 14 (High Bake), 18 and 19 (Paint Mix Rooms)

VOC Emissions from each of the four coating/paint lines will be used in making the compliance demonstration with the 85 % control requirement on a **daily** basis. The 85 % control requirement applies to each line. The coating line for each plastic parts operation shall have the same definition as a coating line in 401 KAR 59:225 §1(7). Compliance with the 85 % control of VOC emissions shall be demonstrated daily based on continuous measurements taken by the following methodology:

- 1. The daily overall control efficiency demonstration shall be based on the most recent compliance test.
- 2. The control efficiency for emission units **02**, **03**, **12** and **14** is the product of the overall capture efficiency (the average of the three Permanent Total Enclosures (PTE)) and the weighted average (by paint usage) Regenerative Thermal Oxidizer (RTO) destruction efficiency.
- 3. The VOC emissions from the miscellaneous operations at the facility that are **NOT** controlled are as follows:

Parts rack for emission units **03** and **12** when outside PTE 0.67 lb/hr Parts rack for emission units **03** and **12** when inside PTE 0.00 lb/hr Mask clean-up for emission units **03** and **12** 0.17 lb/hr Emission unit **14** water treatment system 0.00 lb/hr Emission unit **03** water treatment system 0.00 lb/hr Emission unit **14** solvent storage (8,000 & 7,750 gal. tanks) 0.15 lb/hr Emission unit **02** solvent storage (8,000 & 7,750 gal. tanks) 0.15 lb/hr

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

# **Continuous Compliance Plan (Continued) Emission Units 02, 03, 12, 14, 18 and 19**

4. The permittee shall record all hours when either paint mix room is exhausted to the atmosphere. The VOC emissions (lb/hr) for each paint mix room (emission units **18** and **19**) measured during the most recent compliance test shall be multiplied by the hours of venting the paint mix rooms to the atmosphere to determine the lbs of VOC emissions. This value shall be used to calculate the overall control efficiency of that entire line.

#### **Compliance Demonstration Equation:**

Line Control efficiency (%) = [1 - (atmospheric emissions/total uncontrolled emissions)] x 100

Where

**atmospheric emissions** = [line solvent usage for the day (lbs)]  $x [(1.0 - \text{Overall control efficiency for paint lines (emission units$ **02, 03, 12**and**14))]**+ [(hours of emissions from paint mix room] <math>x [(lb/hr) emission rate determined during the most recent compliance test)] + [daily emissions from other ancillary sources on line (lbs)]

**total uncontrolled emissions** = [line solvent usage for the day (lbs)] + [(hours of emissions from paint mix room] x [(lb/hr) emission rate determined during the most recent compliance test)] + [daily emissions from other ancillary sources on line (lbs)]

- 5. The Line Control efficiency (%) is the value that is compared to the permit limitation of 85 % control.
- 6. The permittee will NOT be required to quantify paint usage on a 24-hour basis for the purposes of compliance with 401 KAR 51:017, however the permittee may be required to calculate the daily overall and/or line control efficiency upon request by the Division. Daily compliance with the 85 % control requirement will be demonstrated based on the integrity of the PTEs and operating temperatures of the RTOs.

#### **PTE Monitoring**

Continuous compliance with the 100% capture requirement will be demonstrated when the facial velocity of air entering the PTE is at least 200 feet per minute for emission units 02 and 14 and when the pressure differential is at least negative 0.007 inches of  $H_2O$  (from the outside of the PTE to the inside of the PTE) for emission units 03 and 12.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

### **Continuous Compliance Plan (Continued) Emission Units 02, 03, 12, 14, 18 and 19**

#### PTE Monitoring for Emission units 02 (High Gloss) and 14 (High Bake)

For emission units **02** and **14**, the permittee shall monitor velocity in the duct immediately downstream from the two supply fans at the PTE entrance (where the chain carrying parts to be painted enters the PTE) and the PTE exit (where the chain carrying the dry painted parts leaves the PTE) to ensure a 200-fpm facial velocity at each of the PTE's natural draft openings. The velocity measured at the natural draft opening must be at least 200-fpm to meet the PTE criteria. Compliance shall be demonstrated when the velocities for all 3-hour block averaging periods in the supply air ducts are equal to or greater than the velocities measured during the most recent performance test approved by the Division.

The damper of the exhaust fan that pulls air from the 4 vestibules serving emission unit 14 and the 6 vestibules serving emission unit 02 shall be set to assure that a negative pressure of at least 0.007 inches of  $H_2O$  is achieved in the "middle" of the large PTEs that surround emission units 14 and 02. Compliance will be assumed to be demonstrated when the velocities for all 3-hour block averaging periods in the 2 exhaust ducts (High Bake vestibules (4) and High Gloss vestibules (6)) are equal to or greater than the velocities used to establish the set points needed to achieve negative 0.007 inches of  $H_2O$  in each of the vestibules.

### PTE Monitoring for Emission units 02 (High Gloss) and 14 (High Bake)

(Continued)

The velocity values for the exhaust ducts may change slightly as compared to the official compliance test values that are required to be conducted once every 5 years because the exhaust airflow rates may have to be increased or decreased to accommodate the critical air balance that is needed to operate each of the robotic paint booths. If changes are needed to operate the paint booths, the permittee shall measure and document the pressure differential readings in each of the vestibules and the corresponding exhaust duct flow rate. If the dampers are adjusted, the permittee shall record the pressure differential in each of the vestibules and corresponding velocity in the vestibule exhaust duct. These records shall be provided to the Division upon request.

The permittee may use either of the two previously mentioned methods ( $\Delta P$  or facial velocity) for the purpose of PTE validation. The permittee shall identify and report all 3-hour block averages when the set point criteria are not met. If either of the two methods indicate that PTE criteria are not met, then an investigation shall be conducted to determine the cause of the failure to meet the PTE criteria. The results of the investigation and corrective actions taken shall be recorded. These records shall be submitted to the Division upon request.

If the average of any of the three monitoring points is below the set point for greater than a 15-minute period, the permittee shall use a prorated capture efficiency based on the set point value. The prorated capture efficiency shall be determined by the following equation:

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## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

### **Continuous Compliance Plan (Continued) Emission Units 02, 03, 12, 14, 18 and 19**

 $\frac{Recorded \ average \ value \ for 15 \ minute \ period (fpm)}{Set point \ value \ for the \ PTE} \qquad x \quad 100\% = Prorated \ capture \ efficiency$ 

If the prorated capture efficiency determined by the above equation is less than 75 %, then the permittee must assume zero (0) % capture efficiency.

#### PTE Monitoring for Emission units 03 (Low Gloss) and 12 (Resist)

The permittee shall monitor the pressure differential at a representative point in the enclosure near the resist paint booth via a continuously measuring pressure differential monitor. Continuous compliance with the 100 % requirement will be demonstrated when all 3-hour block average  $\Delta P$  values are at least -0.007 inches of H<sub>2</sub>O (specifically -0.007 and greater negative  $\Delta P$ ).

#### PTE Monitoring for Emission units 03 (Low Gloss) and 12 (Resist) (Continued)

For all periods that the pressure differential monitor for emission units **03** and **12** do not meet the set point for the 3-hour block average, the permittee shall assume a capture efficiency of zero (0) for each 15-minute average below the minimum value of –0.007 inches of H<sub>2</sub>O. Compliance with the 85 % overall daily limit will then be calculated based on the number of 15 minute averages above the set point versus below. The following equation shall be used for demonstrating compliance with the BACT limit:

 $\frac{\textit{Number of periods of operation} - \textit{Number of periods below the limit}}{\textit{Number of periods of operation}} \ \ x \ \text{weighted average RTO}$  Destruction efficiency = Control Efficiency

### **RTO Compliance Demonstration**

The combustion chamber<sup>1</sup> temperature of the four regenerative thermal oxidizers will be continuously monitored. All 4 RTOs will have one single set point temperature for normal operation.

<sup>1</sup> Megtec RTOs are designed for a combustion chamber temperature of 1600°F and a retention time of 0.5 seconds.

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## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

### **Continuous Compliance Plan (Continued) Emission Units 02, 03, 12, 14, 18 and 19**

With regard to the RTOs, compliance will be demonstrated as long as there are no 3-hour block temperature averages that fall below the set point combustion chamber temperature minus 28°C (50°F) when a line is operating. If one RTO falls below the set point combustion chamber temperature minus 50°F, that unit will be taken off line. The painting would continue as long there is enough capacity for those lines to operate with or without the paint mix room exhausts being directed to the RTOs. If there is insufficient capacity in the RTOs, painting will be automatically curtailed because of the interlocks to the painting system. When the RTOs are inoperable, painting does not take place and, therefore, compliance will be maintained with the permit conditions. The facility may operate on three or less RTOs as long as sufficient RTO capacity is available to maintain compliance.

#### **Paint Mix Room Exhausts**

The 2 paint mix room exhausts will be directed to the RTOs during normal operations. A signal will be used to identify the times when the exhausts are venting to the atmosphere. The periods that the mix rooms are venting to atmosphere will be recorded. Venting to the atmosphere would only occur if one or more of the four RTOs malfunctioned.

#### Paint Mix Room Exhausts (Continued)

The emissions during any venting to the atmosphere will be tabulated in order to make the continuous compliance demonstration. The uncontrolled emission rates are established as part of the official compliance tests. To some degree the paint mix room emissions are a function of the amount of paint mixed, i.e., the production schedule.

#### **Recorders and Manual Logs**

The continuous velocity and pressure differential measurements will be recorded individually on a strip chart that will be co-located with the Modus sensing devices, i.e., the velocity monitors for the supply and exhaust ducts and the pressure differential monitor on the emission unit **03** (low gloss) PTE. The permittee will determine if production (painting) is occurring for the periods that the monitor might drop below the set point. RTO combustion chamber temperature data is already continuously collected on a strip chart. Logs collected manually will be kept at each of the monitors. The logs, strip charts and RTO temperature charts will be archived to prove compliance with the applicable permit limitations. The strip charts and logs will be used as a back up to the electronic data acquisition system. A malfunction or failure of a strip chart recorder will not be reported to the Division if the data acquisition system was functioning during the same period. If the data acquisition system and strip charts fail for the same or a different reason, the permittee will file a malfunction report with the Division. Manual logs will be kept in the advent of a failure in both the strip charts and data acquisition system.

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## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

**Continuous Compliance Plan (Continued) Emission Units 02, 03, 12, 14, 18 and 19** 

#### **Data Acquisition System**

The permittee has installed a data acquisition system and connected it to a central computer. This system will be used to provide a warning when a specific compliance limit is approached and to shut down a line if a specific compliance level is not achieved (i.e., be directly interlocked to the robotic spraying operations). Monthly and annual reports will be generated from the data archived in the computer. The computer will provide a real time demonstration of compliance and also provide a historical record. Such data will be available for review by an inspector or other regulatory agency personnel. The strip charts and the manual logs will be used as a back up in the event of a data acquisition system malfunction. The strip charts and logs will be used for compliance demonstration during periods of data acquisition system malfunction. No malfunction report will be filed if the strip charts record all required information during any data acquisition system failure.

#### START-UP, SHUTDOWN AND MALFUNCTION

The permittee will operate the corresponding air pollution control system at all times that one or more of the four paint lines is in operation. There are potentially some occasions when a line will be running and the air pollution control system will not be operating due to a start up, shutdown or malfunction. The permittee shall comply with 401 KAR 50:055. The permittee shall document those periods when each line/source is in a start-up, shutdown or malfunction mode. A discussion follows of the actions that the permittee will take.

#### **Line Start Up**

Start up will be based on the ready status of the robotic sprayers. When any sprayer on any line is placed in a ready position, the RTOs will be started (if they are not already operating). When the set point temperature of the RTOs that are needed to support the production is achieved, the robotic sprayers may begin operation. It is likely that the chain or line could be moving at times when the robotic sprayers are NOT in the ready status. This usually occurs for periods of maintenance such as over holidays or long weekends when production is idle. For compliance purposes, emissions will be tracked when the sprayers are ready, the RTOs are at the set point temperature (ready status) and the RTO interlocks have allowed spraying to begin. However, when the RTOs reach ready status, all air from the ovens, spray booths and the PTEs will be delivered to the RTOs. In short, when the robotic sprayers on a particular line are in ready status AND the RTOs are operating, all air will be sent to the RTOs.

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## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

**Continuous Compliance Plan (Continued) Emission Units 02, 03, 12, 14, 18 and 19** 

#### Line Shutdown

For all planned line shutdowns, all air will be vented to the RTOs and the RTOs will operate until such time as the robotic sprayers are removed from a ready status and sufficient time has elapsed to allow several air changes to remove the VOCs from the spraying and drying operations. A signal will be provided to the PLC to change the status from ready to not ready, thus preventing the robotic sprayers from emitting VOCs during scheduled maintenance, reprogramming, etc. All VOC emissions from the process will be controlled when the robots are in a ready status.

#### **Malfunction of Air Pollution Control System**

In case of a malfunction, the control system will continue to operate as long as the robotic sprayers are in a ready status. If the 4-unit RTO destruction system<sup>2</sup> fails, the robotic sprayers would stop spraying (stop emitting VOCs). The exhaust fans would continue to operate by venting air to the RTO unit or to the atmosphere for a period of up to 4 hours. Continuous venting is required to prevent any solvent fume build up in the paint booths, the tunnels or the ovens. The 4-hour period will allow sufficient time for the wet parts to pass completely through the ovens. Repairs will be made as soon as possible and the RTOs will be brought back to ready status. If VOCs are still present in the system the remaining VOCs and exhaust will be directed through the RTOs. A malfunction report will be filed with the Division if a malfunction occurs and causes the bypassing of VOCs to the atmospheres.

If any of the three PTEs do not meet the set point values for any 15-minute period (200-fpm facial velocity or negative 0.007 inches of H<sub>2</sub>O pressure differential), a warning signal will be provided to the operators indicating that there is a potential malfunction related to the enclosure (e.g., fan failure, door blocked open, make-up air/recirculation loop malfunction, etc.). Based on the nature of the warning and malfunction, the line will be shut down as needed to maintain compliance. When the line is started after a scheduled shutdown or a malfunction has been corrected, the demonstration of compliance for the PTEs will commence with the next 3-hour block average that is collected. Deviations from the set points will be recorded during periods of operation. If a deviation results in the release of VOCs to the atmosphere due to a bypass situation of a mix room or paint line a malfunction report will be filed with the Division. If no release of excess emissions occurs, no malfunction report will be filed.

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<sup>&</sup>lt;sup>2</sup> The VOC control system, which has a common manifold, is designed/sized to operate with 3 of the 4 RTOs being capable of handling all 4 paint lines. If one RTO fails, then the painting could continue because there is sufficient capacity in three units to handle the flow rate from all four lines. However, depending on which unit fails, there may not be enough remaining capacity to handle the paint mix room exhausts, especially if all lines are operating and one of the large RTOs fails.

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## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

## **Continuous Compliance Plan (Continued) Emission Units 02, 03, 12, 14, 18 and 19**

If the deviation causes the facility to not meet the daily BACT requirement and the deviation was a result of a malfunction a malfunction report will be filed with the Division.

If there is insufficient capacity in the 4-unit RTO system due to a malfunction of one or more units, the interlocks will first vent the paint mix room exhausts and then the paint lines to atmosphere until the available capacity is adequate. Painting will be curtailed by the interlocks on any bypassed paint lines. The bypassing of the mix rooms will be reported to Division.

#### **Paint Mix Room Discharge to Atmosphere**

Should one of the RTOs fail or malfunction resulting in insufficient capacity to treat all sources, the permittee would discharge the paint mix room exhausts directly to the atmosphere. An interlock system will be set to the T-dampers from the paint mix rooms to accomplish this. The time periods of an RTO malfunction will be recorded and the computations for demonstrating compliance will reflect that no controls operated during these periods. The uncontrolled emission rates obtained from the most recent compliance test for the paint mix rooms (adjusted for production, if necessary) will be used in calculating emissions to the atmosphere and overall control efficiency for the facility (control efficiency compliance equation described earlier).

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### **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V*\*Permits\* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit:
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Ashland Regional Office 1550 Wolohan Drive, Suite 1 Ashland, KY 41102-8942 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

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#### **SECTION G - GENERAL PROVISIONS**

#### (a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

- a. Applicable requirements that are included and specifically identified in the permit and
- b. Non-applicable requirements expressly identified in this permit.
- 17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

### (b) <u>Permit Expiration and Reapplication Requirements</u>

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

#### (c) Permit Revisions

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

(d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u> *None* 

#### (e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

#### (f) <u>Emergency Provisions</u>

- 1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

#### (g) <u>Risk Management Provisions</u>

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

### (h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

#### (i) Special Requirements

Any incident which occurs which is subject to reporting statutes, must first be reported to the superintendent of the school district and the principal of the Rowan County Senior High school. This requirement is pursuant to a request from the Rowan County Board of Education and the mandate to the Cabinet from the Kentucky General Assembly in KRS 224.10-100, KRS 224.20-100 and KRS 224.01-400.

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### **SECTION H - ALTERNATE OPERATING SCENARIOS**

N/A

#### **SECTION I - COMPLIANCE SCHEDULE**

Regulation, 40 CFR Part 63, Subpart PPPP – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products

- 1. For an existing affected source, the compliance date is the date 3 years after April 19, 2004. § 63.4483 (b)
- 2. For an existing affected source, you must submit the initial notification no later than 1 year after April 19, 2004. § 63.4510 (b)